i.e. wider than in the embodiment of FIG. **3**. The hinge structure **3** is designed such that in the operating position of the device a portion of the spring element **5** extends under the lower surface of the base part **2**. The spring element **5** thus lifts the rear edge of the base part **2** off the plane **9** under the device, whereby the keyboard **11** arranged in the base part **2** turns towards the user in an extremely advantageous position ergonomically.

FIG. **5** shows a schematic perspective view of one embodiment of the spring element in the hinge structure of the invention in a rest position. The spring element **5** comprises a first end **6***a* and a second end **6***b* which are substantially parallel and which are arranged in their respective attachment means **7** in the cover part and base part during assembly of the hinge structure. In order to facilitate the attachment, grooves, protrusions or other corresponding forms or structures known per se can be provided in the ends **6***a*, **6***b*. The curved portion between the ends **6***a*, **6***b* of the spring element **5** is the actual spring part which, on one hand, deflects when the distance between the ends changes, and on the other hand, the spring force resulting from said deflection tends to return the spring element **5** to its rest position. The shape of the spring element **5** can also be curved in some other manner than what is shown in the figure, approximately L-shaped, discontinuously curved form, in which two substantially straight portions are at an angle with each other. In the present application, the term curved refers to a form that may comprise two or more straight portions at an angle with each other, or a continuously curved portion, such as an arc of a circle, or combinations thereof. It is substantial in the shape of the spring element **5** that when the distance between the ends of the element changes on rotating the parts **1**, **2**, the element **5** deflects controllably and regularly in the same manner.

The cross section of the spring element **5** of FIG. **5** is round but it can also be e.g. rectangular, moreover, the cross section of the spring element need not necessarily be the same at each point as in the figure. The element **5** is simple and fast to manufacture, so the manufacturing costs are low. In addition, it is easy to handle a relatively large but uncomplicated element **5** during the assembly of the device. The spring element **5** can be made of metal or other conductive material and connected to the electronic components of the device such that e.g. ground plane between the cover part **1** and the base part **2** is supplied via the element **5**. By coating the conductive spring element **5** with a suitable insulating material it is also possible to supply operating voltage from one part **1**, **2** to the other via said spring element.

FIG. **6** shows a schematic view of a part of a second embodiment of the hinge element in the hinge structure in perspective and partly cut open. A conductive element **12** interconnecting the element ends **6***a*, **6***b*—of which only the first end **6***a* is shown in the figure, for the sake of clarity—is arranged inside the spring element **5**. The conductive element **12** can be, for instance, a thin wire, an RF cable, an optical fibre a like element that can convey signals between the cover part **1** and the base part **2**. It is possible to arrange more than one conductive element **12** in the spring element **5** such that each conductive element **12** conveys a separate signal. The conductive element **12** can also be arranged insulated inside the spring element **5** made of conductive material, whereby the ground plane passes via the spring element, and specific signals or operating voltage pass via the conductive element **12** arranged thereto.

FIG. **7** shows a schematic perspective view of a part of a third embodiment of the hinge element in the hinge structure. The spring element **5** is substantially broader than the element shown in FIGS. **1** to **6**, even extending throughout the width of the device. This suitably curved, plate-like element is preferably made of plastic or sufficiently thin metal structure. The conductive element **12** is arranged on the inner surface of the spring element **5** by gluing or in any known manner, the conductive element being a planar, flexible electric conductor, such as a flat cable or a flex-type flexible conductor, for instance a flexible printed board, made of polyamide, which comprises a flexible base material. A so-called flexible conductor cable is also known, which consists of a flexible base material and conductors arranged on the surface thereof. The material of conductive patterns is mostly copper foil. Said conductor can also be arranged inside the planar spring element **5**. These solutions have, for instance, the advantage that the conductor, cable, flat cable, flex conductor or the like can be applied from one part to the other protected from external impacts and strains by utilizing said spring element **5**.

The drawings and the specification related thereto are only intended to illustrate the idea of the invention. The details of the invention may vary within the scope of the claims.

What is claimed is:

1. A hinged, foldable electronic device comprising a cover part and a base part, a hinge rotatably attaching said cover part to said base part for rotation between a closed position, in which the cover part overlies and covers the base part, and a fully opened, operating position in which the cover part extends at an angle greater than a predetermined limit angle relative to the base part, said electronic device further comprising a tensioned spring element for restricting the free operation of said hinge, said spring element having a first end rotatably-connected to said cover part and a second end rotatably-connected to said base part, the rotatable connections being about axes which are spaced from and parallel to the rotation axis of said hinge; said tensioned spring element having a spring force, when said first and second ends thereof are flexed apart, which urges the cover part into closed position against the base part when the cover part is rotated to an angle less than said predetermined limit angle, and which also urges the cover part into opened, operating position when the cover part is rotated to an angle greater than the predetermined limit angle relative to the base part.

2. A hinged foldable electronic device as claimed in claim **1**, wherein the portion of the spring element between the first and second ends is curved on a plane that is substantially perpendicular to the rotation axis of the hinge.

3. A hinged foldable electronic device as claimed in claim **1**, wherein at opening angles wider than said predetermined limit angle the spring force of the spring element forces the cover part into an operating position.

4. A hinged foldable electronic device as claimed in claim **3**, wherein the spring element supports the device in the operating position.

5. A hinged foldable electronic device as claimed in claim **3**, wherein the spring element lifts the rear edge of the base part of the device off the plane under the device.

6. A hinged foldable electronic device as claimed in claim **3**, wherein in the operating position the opening angle between the cover part and the base part is between about 140° to 160°.

7. A hinged foldable electronic device as claimed in claim **1**, wherein at opening angles smaller than said predetermined limit angle the spring force of the spring element forces the cover part against the base part into a completely closed position.